

## Title (en)

Marker sequences for Neuromyelitis Optica (NMO) and use thereof

## Title (de)

Markersequenzen für Neuromyelitis optica (NMO) und Verwendungen dafür

## Title (fr)

Séquences de marqueurs de la neuromyéélite optique (NMO) et son utilisation

## Publication

**EP 2735875 A1 20140528 (EN)**

## Application

**EP 12194508 A 20121127**

## Priority

EP 12194508 A 20121127

## Abstract (en)

The present invention relates to new markers for Neuromyelitis Optica (NMO), a method for identifying markers for NMO, the use of the markers identified by the method, diagnostic devices, panels of markers, assays, protein arrays comprising markers for NMO and a method for detecting NMO.

## IPC 8 full level

**G01N 33/68** (2006.01); **G16B 20/20** (2019.01); **G16B 40/00** (2019.01)

## CPC (source: EP US)

**G01N 21/6486** (2013.01 - US); **G01N 33/564** (2013.01 - US); **G01N 33/6896** (2013.01 - EP US); **G16B 20/20** (2019.01 - EP US); **G16B 40/00** (2019.01 - EP US); **G01N 2800/285** (2013.01 - US); **G16B 20/00** (2019.01 - EP US)

## Citation (applicant)

- WO 9957311 A2 19991111 - MAX PLANCK GESELLSCHAFT [DE], et al
- WO 9957312 A1 19991111 - MAX PLANCK GESELLSCHAFT [DE], et al
- "Psyhyrembel", 2012
- J. SAMBROOK; E. F. FRITSCH; T. MANIATIS: "Molecular cloning: A laboratory manual", 1989, COLD SPRING HARBOR LABORATORY PRESS
- "Molecular Biology", 1989, GREEN PUBLISHING ASSOCIATES AND WILEY INTERSCIENCE
- TERPE ET AL., TERPE T APPL MICROBIOL BIOTECHNOL., vol. 60, no. 5, January 2003 (2003-01-01), pages 523 - 33
- SAMBROOK ET AL.: "Molecular Cloning, A laboratory handbook", 1989, CSH PRESS
- KUHLE J; PETZOLD A: "What makes a prognostic biomarker in CNS diseases: strategies for targeted biomarker discovery? Part 2: chronic progressive and relapsing disease", EXPERT OPINION ON MEDICAL DIAGNOSTICS, vol. 5, no. 5, September 2011 (2011-09-01), pages 393 - 410
- LENNON VA; WINGERCHUK DM; KRYZER TJ; PITTOCK SJ; LUCCHINETTI CF; FUJIHARA K; NAKASHIMA I; WEINSHENKER BG: "A serum autoantibody marker of neuromyelitis optica: distinction from multiple sclerosis", LANCET, vol. 364, 2004, pages 2106 - 2112, XP005062219, DOI: doi:10.1016/S0140-6736(04)17551-X
- WINGERCHUK DM; LENNON VA; PITTOCK SJ; LUCCHINETTI CF; WEINSHENKER BG.: "Revised diagnostic criteria for neuromyelitis optica", NEUROLOGY, vol. 66, no. 10, 23 May 2006 (2006-05-23), pages 1485 - 9
- FAZIO R; MALOSIO ML; LAMPASONA V; DE FEO D; PRIVITERA D; MARNETTO F; CENTONZE D; GHEZZI A; COMI G; FURLAN R: "Antiaquaporin 4 antibodies detection by different techniques in neuromyelitis optica patients", MULTIPLE SCLEROSIS, vol. 15, no. 10, 2009, pages 1153 - 1163
- WATERS P; VINCENT A: "Detection of anti-aquaporin-4 antibodies in neuromyelitis optica: current status of the assays", INT MS J., vol. 15, no. 3, September 2008 (2008-09-01), pages 99 - 105
- BENJAMINI Y; HOCHBERG Y: "Controlling the false discovery rate: a practical and powerful approach to multiple testing", JOURNAL OF THE ROYAL STATISTICAL SOCIETY B, vol. 57, 1995, pages 289 - 300

## Citation (search report)

- [A] CROSS SHELLEY ANN: "Rethinking neuromyelitis optica (Devic disease).", JOURNAL OF NEURO-OPHTHALMOLOGY : THE OFFICIAL JOURNAL OF THE NORTH AMERICAN NEURO-OPHTHALMOLOGY SOCIETY MAR 2007, vol. 27, no. 1, March 2007 (2007-03-01), pages 57 - 60, XP002693431, ISSN: 1070-8022
- [A] EMILIO BENAVENTE ET AL: "Neuromyelitis Optica-AQP4: An Update", CURRENT RHEUMATOLOGY REPORTS, CURRENT SCIENCE INC, NEW YORK, vol. 13, no. 6, 16 September 2011 (2011-09-16), pages 496 - 505, XP019972498, ISSN: 1534-6307, DOI: 10.1007/S11926-011-0211-9
- [Y] REYNOLDS MARK A ET AL: "Early biomarkers of stroke.", CLINICAL CHEMISTRY OCT 2003, vol. 49, no. 10, October 2003 (2003-10-01), pages 1733 - 1739, XP002693432, ISSN: 0009-9147
- [XY] SATOH J-I ET AL: "Microarray analysis identifies an aberrant expression of apoptosis and DNA damage-regulatory genes in multiple sclerosis", NEUROBIOLOGY OF DISEASE, BLACKWELL SCIENTIFIC PUBLICATIONS, OXFORD, GB, vol. 18, no. 3, 1 April 2005 (2005-04-01), pages 537 - 550, XP004779664, ISSN: 0969-9961, DOI: 10.1016/J.NBD.2004.10.007
- [Y] "ISNI 2010 Abstracts", JOURNAL OF NEUROIMMUNOLOGY, ELSEVIER SCIENCE PUBLISHERS BV, XX, vol. 228, no. 1-2, 15 November 2010 (2010-11-15), pages 1 - 219, XP027402284, ISSN: 0165-5728, [retrieved on 20100922]
- [Y] HERGES KATJA ET AL: "Protective effect of an elastase inhibitor in a neuromyelitis optica-like disease driven by a peptide of myelin oligodendroglial glycoprotein.", MULTIPLE SCLEROSIS (HOUNDMILLS, BASINGSTOKE, ENGLAND) APR 2012, vol. 18, no. 4, April 2012 (2012-04-01), pages 398 - 408, XP009167749, ISSN: 1477-0970

## Cited by

EP3423835B1; CN106661623A

## Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

## Designated extension state (EPC)

BA ME

## DOCDB simple family (publication)

**EP 2735875 A1 20140528**; EP 2926141 A1 20151007; US 2015323529 A1 20151112; WO 2014083087 A1 20140605

## DOCDB simple family (application)

**EP 12194508 A 20121127**; EP 13814051 A 20131127; EP 2013074915 W 20131127; US 201314647513 A 20131127